Title (en)

MARTENSITIC STAINLESS STEEL SHEET HAVING EXCELLENT CORROSION RESISTANCE AND METHOD FOR MANUFACTURING SAME, AND MARTENSITIC STAINLESS BLADED PRODUCT

Title (de)

MARTENSITISCHES EDELSTAHLBLECH MIT HERVORRAGENDER KORROSIONSBESTÄNDIGKEIT UND VERFAHREN ZUR HERSTELLUNG DAVON SOWIE MARTENSITISCHES EDELSTAHLSCHAUFELPRODUKT

Title (fr)

FEUILLE D'ACIER INOXYDABLE MARTENSITIQUE PRÉSENTANT UNE EXCELLENTE RÉSISTANCE À LA CORROSION ET SON PROCÉDÉ DE FABRICATION, ET PRODUIT À LAME EN ACIER INOXYDABLE MARTENSITIQUE

Publication

EP 4306661 A1 20240117 (EN)

Application

EP 22767042 A 20220304

Priority

- JP 2021039491 A 20210311
- JP 2022009534 W 20220304

Abstract (en)

A martensitic stainless steel sheet has a steel composition including: by mass%, 0.30 to 0.60% of C; 0.05 to 1.00% of Si; 0.10 to 1.50% of Mn; 11.0 to 15.0% of Cr; 0.01 to 0.60% or less of Ni; 0.01 to 0.50% of Cu; 0.01 to 1.0% of Mo; 0.01 to 0.50% of V; 0.03% or less of Al; 0.01 to 0.05% of N; 0.01 % or less of O. The martensitic stainless steel sheet satisfies that: carbides observed in an area of a plate thickness of 1/2t ± 0.7 mm on a test surface parallel to a rolling direction and a plate thickness direction of the steel sheet has 3.0 or less of a carbide cleanliness index, the carbides being defined as inclusions corresponding to inclusions of Type B specified in JIS G0555; that a carbide area ratio is 2% or less through observation using a 200-fold optical microscope; or that a content of coarse carbides collected with a filter having 10-μm mesh in an extraction residue analysis with respect to an entire thickness of the steel sheet is 0.6 mass% or less in terms of a Cr content.

IPC 8 full level

C21D 6/00 (2006.01); **C21D 9/00** (2006.01); **C21D 9/46** (2006.01); **C22C 38/00** (2006.01); **C22C 38/46** (2006.01); **C22C 38/54** (2006.01)

CPC (source: EP US)

C21D 1/26 (2013.01 - EP); **C21D 6/002** (2013.01 - EP); **C21D 8/0205** (2013.01 - EP); **C21D 8/0226** (2013.01 - US); **C21D 8/0236** (2013.01 - US); **C21D 8/0263** (2013.01 - EP US); **C21D 8/0273** (2013.01 - EP US); **C21D 9/46** (2013.01 - EP US); **C22C 38/001** (2013.01 - US); **C22C 38/002** (2013.01 - EP US); **C22C 38/005** (2013.01 - EP); **C22C 38/008** (2013.01 - EP); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - US); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP); **C22C 38/52** (2013.01 - EP); **C22C 38/54** (2013.01 - EP); C21D 2211/004 (2013.01 - EP); C21D 2211/008 (2013.01 - US); Y02P 10/20 (2015.11 - EP)

Designated contracting state (EPC)

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BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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DOCDB simple family (application)

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